

Exploring AI-Assisted Language Learning for EFL Learners' Speaking Development in Suburban Contexts

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Abstract

This study investigates the ways in which artificial intelligence (AI) technologies can assist English as a Foreign Language (EFL) learners at suburban universities in overcoming challenges related to limited speaking practice and authentic communicative interactions. Using a qualitative phenomenological approach, the research involved 15 students from Universitas Nahdlatul Ulama Blitar and Universitas Merdeka Pasuruan. Data were collected through semi-structured interviews and analyzed using phenomenological reduction, detailed description, and identification of essential meanings. The findings indicate that AI-powered speaking tools enable students to practice independently, receive immediate and non-judgmental feedback, and improve confidence despite restricted human interaction. Participants reported greater flexibility and accessibility in developing speaking skills. However, the study highlights that the successful use of AI tools relies on their effective pedagogical integration, including adequate teacher support, alignment with instructional goals, and the provision of collaborative learning opportunities. The study concludes that AI can effectively enhance speaking competence when combined with meaningful human support and instructional facilitation.

Keywords: *AI-assisted language learning; Speaking development; Educational technology; Higher education; Suburban context.*

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Introduction

Technology is becoming more vital in education, facilitating collaboration among university students and lecturers (Waluyo et al., 2022). A notable innovation in contemporary education is the introduction of artificial intelligence (AI)-driven tools designed to facilitate EFL learners' language development. Such technologies contribute to second language acquisition by providing individualized feedback, adaptive learning pathways, and exposure to authentic communicative situations (Abu Sahyon et al., 2023; Oladele Jegede, 2024). The use of AI-based tools in higher education EFL instruction is growing, bringing both advantages and challenges. These technologies enable customized learning by adjusting to each student's needs and preferred learning approaches (Amin, 2023). Speaking, as one of the four core language skills, remains a critical yet challenging component for EFL learners, particularly those situated in suburban areas where exposure to authentic English-speaking environments

and access to qualified instructors are often limited. Recent research shows that language learning platforms incorporating AI greatly improve students' English speaking abilities. In traditional suburban classroom settings, these ideal conditions are not always feasible. AI-based pronunciation tools have proven effective in improving speech clarity, boosting learner motivation, and reducing anxiety related to speaking (Dennis, 2024; Hana Vančová, 2023; Karim et al., 2020). In comparison with traditional instructional methods, learners who utilize AI-based applications demonstrate significant improvements in fluency, pronunciation, vocabulary acquisition, and overall speaking proficiency (Aliakbar Tajik, 2025; Dandu, 2024; Qassrawi et al., 2024). AI tools, therefore, are increasingly being viewed as potential solutions to bridge this gap and offer equitable learning opportunities across geographic and socio-economic boundaries.

Despite the growing body of research on AI integration in language education, empirical evidence regarding its effects on suburban EFL learners, especially in relation to speaking development, remains limited. Furthermore, the implementation of technology-enhanced language learning often faces significant challenges in contexts with constrained resources (Hoxha et al., 2020). Moreover, EFL instruction in suburban universities, lecturers actively engage with technology but face challenges due to digital inequality and limited support (Waluyo et al., 2022). Even when technology is available, its pedagogical integration is often superficial, lacking alignment with speaking-oriented outcomes. Hence, this study seeks to fill this gap by investigating the role and effectiveness of AI-based tools in enhancing the speaking competence of EFL learners in suburban higher education institutions. The study intends to investigate the ways in which AI-assisted learning tools can facilitate the development of EFL learners' speaking abilities and to analyze learners' perceptions of the effectiveness of such technologies in supporting oral language acquisition in suburban higher education environments. It focuses on assessing both the learners' performance improvements and their perceptions toward AI-assisted speaking tasks.

Although AI in EFL learning has been widely investigated, its specific application to suburban learners remains underexplored. By examining AI tools such as AI-powered dialogue systems, this study aims to uncover how these technologies can compensate for the lack of student interaction and speaking opportunities in suburban settings. Furthermore, this research also considers the pedagogical design necessary for successful AI integration. These considerations play a vital role in positioning AI tools as core components of communicative language instruction rather than simply serving as additional technological aids. The expected outcome is a set of contextually grounded recommendations for EFL instructors and curriculum designers in suburban higher education institutions to improve students' speaking skills using AI tools. The study also contributes to the theoretical discourse by linking AI-based learning with sociocultural perspectives of language acquisition. It recognizes that Interaction through social networks can significantly enhance learners' speaking abilities within AI-supported language learning environments (Zou et al., 2023).

Research Questions:

How AI-based tools can be effectively utilized to enhance the speaking competence of EFL learners in suburban university settings?

What are EFL learners' perceptions of the effectiveness of AI-based tools in enhancing their speaking competence in suburban university settings?

AI-Assisted Language Learning for Developing EFL Speaking Skills

Speaking is generally regarded as one of the most difficult skills for EFL learners to master because it demands not only linguistic knowledge but also self-confidence, fluency, and pragmatic competence. A digital skill used to improve speaking proficiency is educational speaking technology (Genanew et al., 2023). In many EFL contexts, limited opportunities for authentic interaction and oral practice constrain learners' speaking development. AI-based tools have been increasingly positioned as potential solutions to these challenges by providing learners with virtual environments for oral communication practice. Among the most prominent AI-based tools for speaking development are AI-powered dialogue systems. These

tools function as virtual interlocutors that allow learners to engage in simulated conversations, role-plays, and interactive dialogues. Research indicates that such systems can support learners in practicing pronunciation, expanding vocabulary, and improving fluency through repeated and low-stakes interaction (Min, 2025). Educationally, AI-driven speaking tools offer valuable affordances by creating supportive, low-pressure environments where learners can develop their oral skills without the fear of negative evaluation, thereby enhancing participation and confidence among learners with pronounced speaking anxiety (Shabani, 2026). Second, AI systems enable personalized learning, adapting task difficulty and feedback based on learners' proficiency levels and performance. Third, AI-based speaking activities promote learner autonomy, allowing students to control the pace, frequency, and context of their speaking practice (Bakhov, 2024; Loewen et al., 2019). Despite these benefits, recent research highlights the need to examine learners' perceptions and experiences regarding the use of AI for speaking practice. While learners generally view AI tools as helpful and motivating, concerns persist about the authenticity of interactions and the potential for excessive dependence on technology. Consequently, scholars recommend using AI as a complementary resource rather than a replacement for traditional learning approaches, as overreliance on such tools may negatively affect language development, learner engagement, and academic integrity (Avsheniuk et al., 2025). These findings suggest that while AI-assisted tools hold considerable promise, their pedagogical effectiveness is closely tied to how learners experience and engage with them in specific educational contexts.



Figure 1. AI-Assisted Speaking Tools and Their Pedagogical Functions

Challenges and Opportunities of EFL Speaking Development in Suburban Contexts

Suburban EFL learning contexts present distinctive characteristics that differentiate them from urban and metropolitan settings. The complex challenges faced by rural learners in developing English proficiency, highlighting context-specific factors that shape these difficulties. These challenges encompass limited access to quality educational resources, a shortage of qualified English language instructors, and the effects of socio-economic disparities (Anisa Vinai Kuma, 2023). These contextual factors can significantly affect learners' speaking development and their engagement in oral communication activities. One of the primary challenges in suburban EFL contexts is the limited interactional environment. Classroom teaching frequently adopts a teacher-centered approach that emphasizes grammar and reading skills, which restricts opportunities for communicative speaking practice and consequently contributes to low learner confidence and hesitation to speak among ESL students (Rathnayaka et al., 2024). Speaking anxiety is further intensified by sociocultural factors, including fear of making mistakes and negative peer evaluation. In this regard, technology integration has been increasingly viewed

as a strategic approach to addressing the constraints of suburban learning environments. Digital technologies can broaden learning opportunities beyond classroom settings by enabling learners to access interactive and multimodal educational resources. AI-assisted language learning, in particular, offers a promising avenue for supporting speaking development in contexts where human interaction is limited. By functioning as virtual speaking partners, AI-based tools can partially compensate for the lack of authentic interlocutors and facilitate more frequent oral practice. AI-powered dialogue systems can provide a simulation environment for contextualized speaking tasks, improving language fluency with positive user perceptions (Li & Chang, 2020).

Method

This study employs a phenomenological method within qualitative research to investigate how AI-based tools can be effectively applied to improve the speaking skills of EFL learners in suburban university contexts. The phenomenological approach focuses on uncovering the personal experiences of individual lecturers or students (Creswell & Creswell, 2018). This study recruited 15 students enrolled in General English courses at two suburban higher education institutions in Indonesia, namely Universitas Nahdlatul Ulama Blitar and Universitas Merdeka Pasuruan. Participants were selected through purposive sampling based on their accessibility and suitability for the research objectives (Poth, 2018). Participants were selected for this study based on their potential to provide valuable insights into the central research issue and the main phenomenon being examined (Creswell & Creswell, 2018). A minimum of three subjects is necessary, with descriptive phenomenological investigations generally encompassing a range of 3 to 15 participants (Giorgi, 2008). They were selected based on four key criteria: enrollment in EFL speaking courses, experience with technology-enhanced teaching, experience with AI-Based Tools, and availability and Accessibility. Table 1 shows participant criteria rubrics based on four key aspects, each rated on a scale of 1-5 (1 = very low, 5 = very high):

Table 1. Profiles of the Participants

Participants	Enrollment in EFL Speaking Courses	Experience with Technology-Enhanced Teaching	Experience with AI-Based Tools	Availability and Accessibility	Total Score
S1	5	4	3	5	7
S2	5	5	4	4	8
S3	4	3	2	4	3
S4	5	4	4	5	8
S5	4	3	3	4	4
S6	5	5	5	5	0
S7	4	2	2	3	1
S8	5	4	5	5	9

S9	3	3	3	4	3	1
S10	5	4	4	5	8	1
S11	4	3	2	4	3	1
S12	5	5	5	5	0	2
S13	4	4	3	5	6	1
S14	3	2	1	4	0	1
S15	5	4	4	5	8	1

Table 1 presents the participant criteria rubrics for 15 students who were selected based on four key aspects: enrollment in EFL speaking courses, experience with technology-enhanced teaching, experience with AI-based tools, and availability and accessibility. Each aspect was rated on a scale of 1 to 5, with 1 indicating very low and 5 indicating very high. Participants S1 to S7 are students from Universitas Nahdlatul Ulama (UNU) Blitar, while participants S8 to S15 are from Universitas Merdeka Pasuruan. The table illustrates a variation in student backgrounds and readiness levels, with several participants – such as S6 and S12 – scoring the maximum of 20, indicating strong qualifications across all four criteria. In contrast, a few participants such as S7 and S14 received lower overall scores, reflecting limited experience with either AI tools or technology-enhanced learning environments. Overall, the data highlights a diverse range of competencies among the participants, which is useful for analyzing how different levels of exposure to AI and educational technologies may influence EFL speaking development.

In this study, one-on-one interviews and observation sheets are administered to students after they participate in speaking classes using AI-powered dialogue systems, serving as the primary data collection methods. The questions and prompts in both the interviews and observation sheets are aligned with the study's objectives, emphasizing the participants' experiences (Gallegos, 2005). Data analysis was conducted using a descriptive phenomenological approach involving three key steps: phenomenological reduction, detailed description of participants' experiences, and the search for the essence of the phenomenon. (Giorgi, 1997). Data analysis was conducted through seven phenomenological stages. Initially, interview data were collected to obtain detailed descriptions of participants' experiences. The researcher then read the entire dataset to develop a comprehensive understanding while applying the principle of bracketing. Subsequently, meaning units were identified by locating changes in meaning associated with the phenomenon. These units were then transformed through reduction and imaginative variation to generate deeper insights. The essential constituents and structural dimensions of the phenomenon were identified through further analysis. The findings were subsequently communicated by explaining the relationships among these constituents and their contribution to the overall essence of the phenomenon. Finally, the results were interpreted and contextualized using relevant scholarly literature (Applebaum, 2016; Broomé, 2013; Wertz, 2010). In analyzing the data and formulating conclusions, this study adopts the principle of epoche, whereby the researcher deliberately brackets personal assumptions, biases, and prior understandings of the phenomenon under investigation (Ashworth, 1999). Rather than rejecting, denying, or questioning the existence of reality, this perspective draws upon natural attitudes and everyday assumptions as foundational points for exploring and understanding truth and reality (Clark Moustakas, 1994).

Results and Discussion

Results

Effective Utilization of AI-Based Tools in Enhancing EFL Learners' Speaking Competence in Suburban University Contexts

Based on the responses from the 15 participants outlined in Table 1, the interview data provide valuable insights into how AI-based tools help suburban EFL learners compensate for limited human interaction and speaking opportunities. These responses reflect a range of experiences, particularly among students from UNU Blitar (S1–S7) and UNMER Pasuruan (S8–S15), highlighting both the benefits and limitations of using AI in these educational contexts. Most students reported that they often practice speaking English alone, as opportunities for live conversation are rare in their settings. Participant S1 shared, "I usually practice in the evening when everyone is busy. I open speaking support tools and repeat the sentences. It gives me feedback, especially on pronunciation, which is hard to get from my classmates." This solitary practice routine was common among UNU Blitar students, who often have fewer peers to practice with in their rural environment. S3 added, "There's no one at home who speaks English, and my friends prefer texting. So, I use apps that can talk back to me, like speaking support tools." Students from UNMER Pasuruan showed similar patterns but with slightly more variety in usage due to higher exposure. S10 remarked, "Even though I live in a suburban area, I can talk to AI chatbots anytime. They never get tired, and that's helpful when I want to try new expressions without fear of making mistakes."

Students listed a variety of AI tools they used to enhance their speaking skills. Speaking support tools were the most frequently mentioned. S6, one of the most tech-savvy participants from UNU Blitar, shared, "I use Google Assistant for pronunciation and speaking support tools to simulate conversations. They're all useful, but I like speaking support tools the most because it feels more interactive." In contrast, S9 preferred simpler tools: "I use speaking support tools every day. It's easy to follow, and I can practice speaking a little. But sometimes, I wish it had more speaking conversations." The perceived effectiveness of these tools also varied. For example, S12 believed that AI tools had made a significant difference in her fluency: "I used to be shy speaking English, but now I feel more natural, especially after talking with speaking support tools regularly. It corrects my sentences and even explains my mistakes." Meanwhile, S7 noted some limitations, saying, "The tools are helpful, but they don't always understand what I say, especially if I speak too fast or with an accent."

When comparing AI tools to human interaction, students expressed mixed opinions. Several participants emphasized the non-judgmental nature of AI as a major benefit. S2 explained, "With AI, I'm not afraid of being laughed at. I can make mistakes and learn from them without feeling embarrassed." S13 echoed this point, saying, "I feel more relaxed speaking with AI because it doesn't judge me. But sometimes, I still need a real person to correct me in a more personal way." However, other students acknowledged that AI cannot fully replace human interaction. S5 pointed out, "AI is great for practice, but it doesn't have emotions. A real teacher can encourage me and make me feel more connected." Similarly, S8 stated, "Practicing with my teacher is more meaningful because I get cultural context, tone, and more accurate feedback. AI tools are good, but they're limited." While AI provides accessible and consistent speaking opportunities, it lacks the emotional and social dimensions of human interaction. Confidence building emerged as a key theme in response to the interview question. Many students reported increased self-assurance as a result of regular practice with AI tools. S15 shared, "At first, I was very nervous to speak in class. But after using AI tools like speaking support tools for a few weeks, I started speaking more confidently during group discussions." S4 also mentioned a shift in mindset: "Now I think speaking English is not as scary as before. AI helps me repeat and learn at my own pace." On the other hand, a few participants noted that while AI helps with confidence in solo practice, it does not always translate to real-life conversations. S11 reflected, "I'm okay when talking to an app, but when I talk to a real person, I still feel anxious. Maybe because I'm not used to real interaction." This indicates that while AI tools support low-stress practice environments, they should be supplemented with live speaking opportunities to fully develop communicative competence.

Students identified several benefits and challenges in using AI-based tools within their learning environments. Among the benefits, accessibility, flexibility, and immediate feedback were the most frequently mentioned. S6 remarked, "AI tools are always available. I don't have to wait for class to practice. I just open the app and start speaking." S14, who had lower overall readiness scores, said, "Even though I'm not very advanced, I can still use basic AI features to practice. It helps me slowly get better." Students appreciated the ability to practice anytime and anywhere, which is particularly valuable in suburban contexts with limited language support. However, technical limitations and a lack of personalization were commonly cited challenges. S7 shared, "Sometimes AI doesn't understand my accent, and that's frustrating." S9 added, "The feedback is okay, but it's not always clear. I wish it explained things more like a teacher." Moreover, motivation fluctuated depending on how engaging the AI tools were. S10 expressed enthusiasm, "I feel excited to speak when the app gives me stars or ranks my performance. It makes it fun." In contrast, S3 found it harder to stay engaged over time: "At first, I liked using the app, but after a while, it felt boring. There's no real conversation, just repetition." These comments highlight the importance of varied and meaningful tasks in sustaining learner motivation, which connects to broader pedagogical concerns. The interviews reveal that AI-based tools play a significant role in filling the gaps left by limited human interaction and speaking opportunities in suburban EFL settings. While they offer accessible, self-paced, and low-pressure environments for practicing English speaking, their effectiveness depends on the type of tool, the learner's level, and the presence of pedagogical support. The data suggest that AI can complement—but not completely replace—human interaction, and that thoughtful integration, guided by teachers and aligned with learner needs, is crucial to maximizing the benefits of AI in suburban language learning.

Perceptions of AI-Assisted Speaking Tools among Suburban EFL Learners

Based on the interview responses, several important themes emerged regarding perceptions for effective AI integration. The students' perspectives reflect not only their interaction with AI tools, but also how teaching strategies and classroom contexts influence their learning experience. When asked how their teachers guide or support the use of AI tools for speaking, responses varied significantly between institutions and individual experiences. Some students expressed appreciation for the active role their lecturers played. For instance, S2 explained, "Our lecturer gives us weekly speaking topics and asks us to practice using AI tools like speaking support tools before class. Then we discuss our experience in the next meeting." This indicates a structured approach where AI is intentionally integrated into the speaking curriculum. Likewise, S8 shared, "My lecturer assigns tasks where we need to ask speaking support tools questions in English. It helps us prepare before real speaking tests."

However, several students also mentioned a lack of direct guidance, which impacted their learning. S4 admitted, "Sometimes I feel lost because the teacher just tells us to 'use technology' without explaining what to do. I tried speaking support tools, but I didn't know if I was using it correctly." This absence of mediation creates gaps in learning, especially for students with lower digital literacy or less confidence. S11 echoed this concern, saying, "I need more examples and feedback. Without help, I feel like I'm just pressing buttons on an app without knowing if I'm improving." These responses suggest that teacher involvement is crucial in helping students make the most of AI tools, particularly in guiding them toward purposeful and skill-aligned usage. Many students emphasized whether AI speaking activities matched their class materials. Several participants appreciated that the tasks aligned with classroom themes and vocabulary. S6 shared, "Yes, the AI practice usually matches what we learn in class. For example, if we are learning about 'daily routines,' the app also gives similar topics." S12 agreed, "Our lecturer connects the lesson and AI tasks well. It feels like one whole system, not separate parts." This kind of alignment reinforces learning and gives students a clearer purpose for using the tools.

However, not all students experienced this benefit. S5 noted, "Sometimes the AI apps talk about topics I don't understand or we haven't studied yet. It feels disconnected from what we're doing in class." Meanwhile, S14 pointed out, "The AI gives good feedback, but sometimes the phrases or situations are not common in our exams or real life." This gap reveals

the importance of teacher-curated content that matches curricular goals, particularly for students in suburban settings who may not have strong support outside the classroom to contextualize their learning. In terms of motivation, students reported various factors that kept them engaged when using AI for speaking practice. S3 mentioned, "I use speaking support tools every day. It feels like a small achievement." Others were motivated by the instant feedback and personalized suggestions provided by certain apps. S10 noted, "Speaking support tools helps me know which sounds I say wrong, and I keep practicing until I get a higher score." Moreover, students found motivation in knowing their AI practice contributed to classroom performance. S13 explained, "Our lecturer sometimes checks our app history and gives us a score. That makes me want to use it more seriously." Classroom integration and peer activities also played a role in sustaining interest. S1 said, "When we use AI tools at home and then share our experiences in class, it feels more meaningful. Like, we're not just learning alone." The social element of classroom sharing, even after solo AI practice, helped students feel connected and validated in their efforts. However, a few students noted that repetition and lack of variety sometimes reduced their motivation. S9 shared, "After using the same app for weeks, it gets boring. I wish there were more speaking games or challenges with other students."

Several participants shared experiences of feeling confused or demotivated when teacher guidance was absent. S7 confessed, "I didn't understand how to use speaking support tools properly at first. I asked random things, but it didn't help me speak better. I needed more direction." Similarly, S15 reflected, "Without feedback from my teacher, I wasn't sure if I was improving or just talking nonsense." These statements emphasize that while AI tools offer autonomy, they still require teacher scaffolding to ensure that students remain on track and engaged. S4 offered an example of how this confusion affected her learning "I thought I was practicing pronunciation, but I was actually using the listening feature. It took weeks before I realized I wasn't improving much." When asked about what makes an AI-based speaking activity meaningful, students highlighted characteristics such as interactive feedback, real-life relevance, and teacher connection. S2 emphasized, "It's meaningful when I can apply it in class discussion or real conversation. If the topic is too weird, like 'space tourism,' I don't know how to use it." S10 appreciated when AI tools gave clear, understandable corrections: "I like it when the app not only tells me what's wrong but also shows how to say it better." On the other hand, S6 noted that meaningful learning also comes from teacher involvement: "If my teacher explains the AI results or helps me understand my mistakes, the activity feels more useful. I remember the correction better." Students also found value in tasks that connected AI and peer learning, such as practicing with the app and then recording or sharing in class. S8 explained, "We did a role-play with AI first, and then we acted it out with friends in class. That helped me practice twice and remember more." This layered approach—AI interaction followed by human collaboration—was seen as an ideal pedagogical design.

The responses across the 15 students reflect that AI integration into EFL speaking tasks is most effective when guided by teachers, aligned with classroom goals, and motivated by feedback and engagement features. Students appreciated when teachers actively curated tasks, demonstrated how to use AI tools, and provided follow-up discussions. Misalignment, lack of clarity, or isolated AI usage without teacher involvement often led to confusion and disengagement. While AI tools offer tremendous potential to bridge interaction gaps, especially in suburban contexts, their pedagogical success hinges on thoughtful integration, personalized support, and student-centered design.

Discussion

The findings presented above highlight the nuanced ways in which suburban EFL learners leverage AI-based tools to overcome limitations in human interaction and speaking opportunities. In examining responses from students at UNU Blitar and UNMER Pasuruan, it becomes evident that AI technologies are not merely supplementary but have become integral to learners' speaking practices—particularly in environments where access to English-speaking peers or educators is limited. A key theme that emerges is the autonomous nature of speaking practice facilitated by AI. Most students, especially from UNU Blitar, reported

relying on AI tools during solitary learning moments. A more extensive investigation into AI-supported informal digital English learning found that learners view AI chatbots as helpful tutors and speaking partners, and that practical engagement with these tools boosts their willingness to use them (Liu et al., 2024). The feedback mechanisms provided by AI tools were perceived as especially valuable by participants. As S1 and S12 pointed out, tools like speaking support tools help them identify pronunciation errors and grammatical mistakes. AI-powered tools can support learner development—particularly in pronunciation and fluency—by offering indirect feedback and enhancing motivation (Hana Vančová, 2023). However, as indicated by S7, these tools can sometimes fail to decode non-standard accents or fast speech, indicating the limitations of current AI speech recognition models in diverse linguistic contexts.

Another significant aspect is the psychological safety AI tools offer. Many students—particularly S2 and S13—highlighted the non-judgmental nature of AI interactions. Recent research has investigated how AI technologies can help reduce foreign language anxiety (FLA) and improve language learning outcomes (Bao, 2019). The ability to make mistakes without social repercussions fosters a risk-free environment, which is particularly crucial for lower-proficiency learners who may otherwise avoid speaking altogether. Nonetheless, the limitations of AI tools in replicating human qualities were clearly articulated. Participants like S5 and S8 acknowledged that while AI is helpful for practice, it cannot substitute the emotional resonance, cultural nuance, and real-time adaptiveness of a human interlocutor. The importance of human supervision in implementing AI is highlighted to minimize biases and promote cultural awareness (Klimova & Chen, 2024).

The boost in learner confidence through AI use was another major theme, especially among students like S4 and S15. This supports the position of previous research who emphasize that Web technologies allow students to conveniently access learning materials and take control of their own learning processes, which fosters a high degree of autonomous behavior (Youssef Oubadi, 2024). Yet, S11's comment that AI confidence does not always translate to real-life conversations raises concerns about the transferability of digitally practiced skills to real-world settings. This underscores the importance of integrating AI use within a broader pedagogical strategy that includes face-to-face interaction, peer collaboration, and authentic speaking tasks. Students also discussed the accessibility and flexibility of AI tools as substantial benefits, particularly in suburban or under-resourced environments. This is consistent with other findings which argue that AI-based language learning tools can help make English practice more accessible to everyone, particularly in regions where opportunities to interact in English are limited (Ghafar et al., 2023). However, as seen in the cases of S7 and S9, the lack of personalized feedback and limited explanation remain key shortcomings. These limitations suggest a need for more advanced AI systems capable of adapting to individual learner profiles and providing more nuanced pedagogical responses. Learner motivation and engagement emerged as variable across tools and time. AI tools that fail to evolve in content or interaction risk becoming static, which may hinder long-term engagement.

The results also indicate that AI-powered tools provide valuable support in addressing the distinctive difficulties faced by suburban EFL learners, especially the scarcity of human interlocutors and real-time corrective feedback. They provide autonomy, immediate feedback, and psychological comfort, which are crucial for learners operating outside mainstream urban education systems. However, their effectiveness is conditioned by factors such as the tool's sophistication, learner motivation, and the degree to which AI use is supported by pedagogical guidance. Thus, a blended approach—one that combines the efficiency and availability of AI tools with the emotional intelligence and cultural insight of human interaction—is essential. Language educators should aim to scaffold AI usage by guiding learners toward strategic tool selection, contextualizing AI feedback, and integrating AI practice into broader communicative tasks. As the technology continues to develop, so too must our pedagogical strategies for leveraging it meaningfully in diverse educational contexts.

Results addressing the second research question suggest that the effective implementation of AI-assisted technologies in EFL speaking education is shaped by three essential pedagogical elements: instructor mediation, task relevance, and student motivation. One of the most prominent findings is the pivotal role of teachers in mediating AI use. Students who received structured guidance, such as weekly tasks followed by classroom discussions, demonstrated clearer engagement and purposeful AI tool usage. Previous study highlights the critical role of teachers in actively guiding and shaping the integration of AI into educational practices (Al-Abdullatif, 2024). Conversely, students who lacked teacher support reported confusion and ineffective tool use. S4 and S11, for example, expressed uncertainty and frustration when left to navigate AI applications independently. These insights reinforce the argument by other writer who asserts that although AI provides substantial advantages, its implementation must be thoughtfully approached with attention to pedagogical, ethical, and social considerations (Kristiawan, 2024). Teacher support remains crucial for student learning, especially for those with low digital literacy or limited confidence in speaking skills (Aziza Restu Febrianto, 2019).

Another emerging theme is the necessity for task relevance and curricular alignment. Students such as S6 and S12 appreciated when AI-based tasks mirrored classroom content, reinforcing vocabulary and concepts. This alignment not only increased their engagement but also contributed to more coherent language development. Supporting findings argue that as AI continues to grow in educational settings, it is essential to understand its pedagogical, psychological, and ethical impacts to ensure its proper integration and the development of tools that foster effective learning environments (Krsmanovic & Deek, 2024). However, some students – like S5 and S14 – experienced a disconnect between AI-generated content and their curriculum. This mismatch led to feelings of irrelevance and confusion, particularly when AI tools introduced unfamiliar vocabulary or unrealistic scenarios. These findings align with other researcher who emphasize the increasing significance of AI in EFL teaching and learning lies in its ability to provide various advantages, such as personalized learning, automated assessment, and tailored feedback. Without curricular integration, the educational potential of AI tools remains underutilized (Hazaymeh et al., 2024).

Motivation emerged as both a driving force and a fragile variable. Students like S3 and S10 were energized by measurable progress, real-time feedback, and performance-linked incentives. These motivational factors mirror previous finding that the role of setting goals, providing feedback, and ensuring personal relevance is vital in enhancing motivation and engagement in second language (L2) learning (Wang & Xue, 2022). Apps like speaking support tools provided instant correction, which students perceived as empowering and goal-oriented – a sentiment that supports the other findings regarding the motivational value of AI-powered feedback in language tasks (Bok & Cho, 2023). Additionally, social integration – such as sharing AI-generated responses with peers – further enhanced engagement. As noted by S1 and S8, classroom discussions that followed individual AI use transformed solitary practice into collaborative learning. This aligns with other findings that the need to preserve meaningful human interaction in AI-supported language learning is essential. Research highlights the importance of developing AI systems that work alongside, rather than substitute, human teachers – emphasizing collaborative partnerships (Neimat Idris, 2024). Peer sharing and teacher feedback transform AI tools from isolated self-study platforms into dynamic extensions of the classroom. Nevertheless, a few students, like S9 and S15, expressed a drop in motivation due to monotonous tasks or lack of feedback. Participants' statements indicate that effective learning and continued student engagement in AI-supported environments require a combination of learner independence, optimal task difficulty, adequate support mechanisms, and novel educational experiences (Talgatov et al., 2024).

The most insightful contributions from participants relate to their nuanced understanding of what makes AI-based speaking practice meaningful. Students valued tasks that bridged AI output with real-life communication, relevant classroom themes, and teacher commentary. S6 and S10 particularly appreciated when teachers helped interpret AI feedback, making corrections more understandable and memorable. This finding aligns with the

“human-AI partnership” concept which emphasizes that the significance of AI lies in its role as a complementary tool that strengthens, rather than substitutes, the professional expertise of teachers in educational contexts. The layered design of practicing with AI and then applying the knowledge in peer interactions (Kasepalu et al., 2022), as shared by S8, reflects a well-structured pedagogical model that merges AI capabilities with communicative competence building. Blending synchronous and asynchronous methods can improve students' English speaking abilities, especially in environments with limited real-time speaking opportunities (Agus Rofi'i & Herdiawan, 2024). Importantly, the findings highlight the contextual reality of EFL learners in suburban areas, where access to private language tutoring or immersive environments may be limited. In such contexts, AI tools have the potential to compensate for interactional deficits, but only when deployed with thoughtful instructional design. As the literature suggests (Nikitina, 2024), AI ought to support and enhance teachers' roles rather than substitute them in education, as it can handle repetitive tasks and offer insights based on data.

Conclusion

The interview findings from 15 suburban EFL students at UNU Blitar and UNMER Pasuruan highlight the significant contribution of AI-based technologies in mitigating the lack of authentic speaking practice and limited human interaction within their learning contexts. Many learners reported practicing English independently, using AI-powered speaking applications that provide flexible access and instant feedback. These tools were widely perceived as effective in enhancing learners' speaking confidence by providing a supportive, low-anxiety, and non-judgmental environment in which students can practice without concerns about making errors. This advantage is particularly significant in suburban contexts, where opportunities for interaction with peers and exposure to English are frequently limited. Despite these advantages, the findings also reveal notable limitations. While AI tools effectively support fluency and pronunciation development, they fall short in delivering the nuanced feedback, emotional encouragement, and cultural sensitivity typically provided by teachers and classmates. Several participants emphasized the importance of teacher involvement in guiding the use of AI tools, ensuring that activities are purposeful, meaningful, and aligned with curricular objectives. Learners' motivation to engage with AI varied, largely influenced by the interactivity, relevance, and pedagogical design of the tasks. The findings indicate that AI technologies are most effective when used as supplementary tools that support, rather than replace, human interaction in EFL instruction. Their effectiveness depends heavily on thoughtful pedagogical integration, where teachers act as mediators who align AI-based speaking tasks with classroom content, examinations, and real-life communication needs. Students reported higher engagement and more meaningful learning when AI use was supported by clear instructions, follow-up discussions, and opportunities for peer collaboration, such as sharing recordings or role-playing activities.

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